

(1)

Notice of Allowability	Application No.	Applicant(s)	
	10/623,293	SU ET AL.	
	Examiner	Art Unit	
	Brian J. Davis	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's amendment (11/16/05).
2. ☒ The allowed claim(s) is/are 1-4, 6-15, 17-20 [renumbered 1-18].
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>12/23/03</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

102 Rejections Withdrawn

The rejection of claims 1, 3-6, 9, 16 and 20 under 35 USC 102(b), outlined in the previous Office Action, is withdrawn in response to applicant's amendment and arguments. With respect to claims 5 and 16, the amendment cancels the claims. With respect to the remaining claims, as applicant correctly points out in the response, the previous examiner had factually misinterpreted the cited reference. The rejection is untenable.

103 Rejections Withdrawn

The rejection of claims 2, 7, 8, 10-15 and 17-19 under 35 USC 103(a), outlined in the previous Office Action, is withdrawn in response to applicant's amendment and arguments. As stated above, the previous examiner had factually misinterpreted the central reference. The rejection is untenable.

Allowable Subject Matter

Claims 1-4, 6-15 and 17-20 are allowed. The following is a statement of reasons for the indication of allowable subject matter:

The key limitations of the instant invention with regard to the prior art are the upper limit on the amount of tertiary amine formed (less than 3% by weight), and the lower yield limit of the secondary amine (at least 97%).

Art Unit: 1621

The closest prior art appears to be US 4,373,107, cited by applicant in the IDS, which teaches a process for preparing N-alkyl-alkylenediamines. In particular, example 5, the example closest to the instant invention with respect to limiting the production of tertiary amine, teaches the reaction of ethylene diamine (a primary diamine), hydrogen and acetaldehyde over Pd/C at 7 kg/cm² (100 psi) at 80° C (column 3 line 18). Table I (column 4 line 9) teaches that the products are 92.3% mono adduct and 1% bis-mono adduct. That is, the other possible products (tertiary amines adducts), either as a mixture or alone, are well above the tertiary amine concentration limitation of the instant invention. The prior art process neither teaches nor suggests applicant's invention. Nor would it have been obvious to one of ordinary skill in the art to modify the process of the prior art in order to arrive at that of the instant invention. There is no motivation to do so.

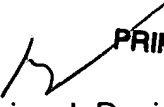
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Davis whose telephone number is 571-272-0638. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 **BRIAN DAVIS**
PRIMARY EXAMINER
Brian J. Davis
March 13, 2006